

## (12) United States Patent

### Northway et al.

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#### (54) INTERFACE FOR INTERACTION WITH DISPLAY VISIBLE FROM BOTH SIDES

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#### Related U.S. Application Data

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- (51) **Int. Cl.**

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- **U.S. Cl.** ...... **345/169**; 345/158; 345/649
- 345/156, 169, 901, 905, 158, 649, 653–659; 361/681

See application file for complete search history.

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(57)ABSTRACT

A portable viewing and computing apparatus. In one embodiment, the present invention is comprised of a bus, a memory unit coupled to the bus, and a processor coupled to the bus. The memory unit is for storing data and instructions. The processor is for processing data and instructions. The portable viewing and computing apparatus is further comprised of a display device coupled to the bus. The display device is comprised of a viewing panel viewable from a front side and a back side. The portable viewing and computing apparatus is further comprised of a display device controller coupled to the bus. The display device controller is for sensing the orientation and rotation of the display device, and in response thereto, for controlling and rendering data on the display device.

#### 27 Claims, 12 Drawing Sheets



